



By this Amendment claims 9 and 15 have been corrected and claims 24-31 have been canceled. Entry is requested.

In the outstanding Office Action claims 1-6, 8-11 and 15-18 have been rejected under 35 U.S.C. 102(b) as being anticipated by Saakarov et al.

The inventors assert that this rejection is incorrect. Saakarov et al. do not disclose the use of crystal elements having a crystal cut with low effective electromechanical coupling factor between 0.05% and 3%.

In contrast to the present invention, Saakarov et al. use a crystal element with a single rotated Y-cut at angles near  $\Phi = 0^\circ$ , where the frequency constant is equal to 1376 kHz mm (see page 717). At  $\Phi = 0^\circ$  the electromechanical coupling factor equals 15% (strong coupling) as can be seen from Fig. 6.

As shown in detail on page 718, column 2, lines 10 to 14, Saakarov et al. state:

The analysis of the data received shows that the most optimum angle of cut for application over a wide temperature range from  $-60^\circ$  to  $+85^\circ\text{C}$  is considered the angle  $\Phi = +1^\circ 30'$ .

At  $\Phi = +1^\circ 30'$  the coupling factor is about 15% as can be seen from Fig. 6, which is quite different from the range of 0.05% to 3% in claim 1 of the present application.

Further, the relationship between a very low electromechanical coupling factor and a very high quality factor (see page 5, paragraph 3 of the present application) is also not disclosed in the Saakharov et al.

The examiner's rejection based on Saakarov et al. should be withdrawn.

The examiner has rejected claims 1-8, 10-14 and 18 under 35 U.S.C. 102(b) as being anticipated by Reiter et al.

However, this rejection must be withdrawn. Note the attached Declaration Under 37 C.F.R. § 1.132.

The examiner has rejected claims 1-18 and 20-23 under 35 U.S.C. § 103(a) as being unpatentable over Saakarov et al. in view of Reiter et al.

However, Reiter et al. is not a usable reference – see attached Declaration Under 37 C.F.R. § 1.132.

Favorable reevaluation is requested.

Respectfully submitted,

By:

DYKEMA GOSSETT PLLC

  
Richard H. Tushin

Registration No. 27,297

Franklin Square, Third Floor West  
1300 I Street, N.W.  
Washington, DC 20005-3353  
(202) 906-8600